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z = the milliamp equivalent of your instrument zero determined from (2)(i).

(iv) Determine your source specific 30-day rolling average operating limit

using the mg/dscm per milliamp value from Equation 2 in equation 3, below. This sets your operating limit at the PM CPMS output value corresponding to 75% of your emission limit.

$$o_l = z + \frac{0.75(L)}{R}$$
 (Eq. 3)

Where:

O_l = the operating limit for your PM CPMS on a 30-day rolling average, in milliamps.

L = your source emission limit expressed in lb/Mmbtu,

z = your instrument zero in milliamps, determined from (2)(a), and

R = the relative mg/dscm per milliamp for your PM CPMS, from Equation 3.

(3) If the average of your three PM compliance test runs is at or above 75%

of your PM emission limit you must determine your operating limit by averaging the PM CPMS milliamp output corresponding to your three PM performance test runs that demonstrate compliance with the emission limit using equation 4 and you must submit all compliance test and PM CPMS data according to the reporting requirements in paragraph (i)(5) of this section.

$$O_{\mathbf{h}} = \frac{1}{n} \sum_{i=1}^{n} X_{i}$$
 (Eq. 4)

Where:

 X_1 = the PM CPMS data points for all runs

n = the number of data points, and

 O_h = your site specific operating limit, in milliamps.

(4) To determine continuous compliance, you must record the PM CPMS output data for all periods when the process is operating and the PM CPMS is not out-of-control. You must demonstrate continuous compliance by using all quality-assured hourly average data collected by the PM CPMS for all operating hours to calculate the arithmetic average operating parameter in units of the operating limit (e.g., milliamps, PM concentration, raw data signal) on a 30-day rolling average basis.

(5) For PM performance test reports used to set a PM CPMS operating limit, the electronic submission of the test report must also include the make and model of the PM CPMS instrument, serial number of the instrument, analytical principle of the instrument (e.g., beta attenuation), span of the in-

struments primary analytical range, milliamp value equivalent to the instrument zero output, technique by which this zero value was determined, and the average milliamp signals corresponding to each PM compliance test

 $[65\ {\rm FR}\ 75350,\ {\rm Dec.}\ 1,\ 2000,\ {\rm as}\ {\rm amended}\ {\rm at}\ 76\ {\rm FR}\ 15451,\ {\rm Mar.}\ 21,\ 2011;\ 78\ {\rm FR}\ 9179,\ {\rm Feb.}\ 7,\ 2013]$

§ 60.2115 What if I do not use a wet scrubber, fabric filter, activated carbon injection, selective noncatalytic reduction, an electrostatic precipitator, or a dry scrubber to comply with the emission limitations?

If you use an air pollution control device other than a wet scrubber, activated carbon injection, selective noncatalytic reduction, fabric filter, an electrostatic precipitator, or a dry scrubber or limit emissions in some other manner, including material balances, to comply with the emission limitations under §60.2105, you must petition the EPA Administrator for

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specific operating limits to be established during the initial performance test and continuously monitored thereafter. You must submit the petition at least sixty days before the performance test is scheduled to begin. Your petition must include the five items listed in paragraphs (a) through (e) of this section.

- (a) Identification of the specific parameters you propose to use as additional operating limits.
- (b) A discussion of the relationship between these parameters and emissions of regulated pollutants, identifying how emissions of regulated pollutants change with changes in these parameters and how limits on these parameters will serve to limit emissions of regulated pollutants.
- (c) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the operating limits on these parameters.
- (d) A discussion identifying the methods you will use to measure and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments.
- (e) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

[76 FR 15451, Mar. 21, 2011, as amended at 78 FR 9180, Feb. 7, 2013]

§60.2120 Affirmative defense for violation of emission standards during malfunction.

In response to an action to enforce the standards set forth in paragraph \$60.2105 you may assert an affirmative defense to a claim for civil penalties for violations of such standards that are caused by malfunction, as defined at 40 CFR 60.2. Appropriate penalties may be assessed if you fail to meet your burden of proving all of the requirements in the affirmative defense. The affirmative defense shall not be available for claims for injunctive relief.

(a) Assertion of affirmative defense. To establish the affirmative defense in any action to enforce such a standard, you must timely meet the reporting requirements in paragraph (b) of this sec-

tion, and must prove by a preponderance of evidence that:

- (1) The violation:
- (i) Was caused by a sudden, infrequent, and unavoidable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner; and
- (ii) Could not have been prevented through careful planning, proper design or better operation and maintenance practices; and (iii) Did not stem from any activity or event that could have been foreseen and avoided, or planned for: and
- (iv) Was not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and
- (2) Repairs were made as expeditiously as possible when a violation occurred; and
- (3) The frequency, amount, and duration of the violation (including any bypass) were minimized to the maximum extent practicable; and
- (4) If the violation resulted from a bypass of control equipment or a process, then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and
- (5) All possible steps were taken to minimize the impact of the violation on ambient air quality, the environment, and human health; and
- (6) All emissions monitoring and control systems were kept in operation if at all possible, consistent with safety and good air pollution control practices; and
- (7) All of the actions in response to the violation were documented by properly signed, contemporaneous operating logs; and
- (8) At all times, the affected source was operated in a manner consistent with good practices for minimizing emissions; and
- (9) A written root cause analysis has been prepared, the purpose of which is to determine, correct, and eliminate the primary causes of the malfunction and the violation resulting from the malfunction event at issue. The analysis shall also specify, using best monitoring methods and engineering judgment, the amount of any emissions that were the result of the malfunction.